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March 7, 2013

Larry Sturm
Anaconda-Deer Lodge County Road Department
800 S Main Street
Anaconda MT 59711

Dear Mr. Sturm:

Montana Air Quality Permit #4863-00 is deemed final as of March 7, 2013, by the Department of Environmental Quality (Department). This permit is for a crushing and screening plant. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A. Merkel

Air Permitting Supervisor

Air Resources Management Bureau

Julio A Merkl

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Craig Henrikson

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JM:CPH Enclosure

Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #4863-00

Anaconda-Deer Lodge County Road Department 800 S Main Street Anaconda MT 59711

March 7, 2013



MONTANA AIR QUALITY PERMIT

Issued To: Anaconda-Deer Lodge Montana Air Quality Permit #4863-00

Road Department Application Complete: January 15, 2013 800 S Main St. Preliminary Decision: January 31, 2013

Anaconda, MT 59711 Department Decision Issued: February 19, 2013

Permit Final: March 7, 2013

AFS #: 777-4863

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Anaconda-Deer Lodge County Road Department (ADLC) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Permitted Equipment

MAQP #4863-00 allows the operation of two crushers each with a vibrating scalping screen each powered by a diesel-fired engine. Additional power is provided by two diesel-fired generators which feed both the internal and external conveyors. Total diesel-fired engine horsepower (hp) for all equipment is limited to 630.

B. Plant Location

ADLC operates an asphalt crushing and screening facility located in Township 4 North, Range 10 West in Section 6 in Deer Lodge County, Montana. MAQP #4863-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department) approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas. A summary of equipment used in developing the emission inventory is contained in Section I.A. of the Permit Analysis to MAQP # 4863-00.

SECTION II: Conditions and Limitations

A. Emission Limitations

- 1. All visible emissions from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
 - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
 - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity

- 2. All visible emissions from any other NSPS-affected equipment, other than a crusher (such as screens or conveyor transfers), shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
 - For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commences construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8. 304).
- 4. Water and spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
- 5. ADLC shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
- 6. ADLC shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
- 7. ADLC shall not operate more than two crushers at any given time with the maximum rated design capacity of each crusher not exceeding 75 tons per hour (TPH) (ARM 17.8.749).
- 8. ADLC shall not operate than the two screens at any given time with the maximum rated design capacity of each screen not exceeding 75 TPH (ARM 17.8.749).
- 9. The combined rating of the engines (directly driving crushers, screens, conveyors, etc) shall not exceed 630 hp at any time (ARM 17.8.749).
- 10. The total hours of each diesel-fired engine that may be used under this permit shall be limited to 1,000 hours of operation during any rolling 12-month time period (ARM 17.8.749).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by ADLC, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 12. ADLC shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National*

Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

13. ADLC shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

- 1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. ADLC shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 3. ADLC shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

- 4. ADLC shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by ADLC as a permanent business record for at least 5 years following the date of the measurement, must be available for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
- 5. ADLC shall document, by month, the hours of operation of each diesel engine/generator. By the 25th of each month, ADLC shall calculate the hours of operation of each diesel engine/generator. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

ADLC shall provide the Department with written notification of the actual start-up date of the facility postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection ADLC shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (CERMS)), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if ADLC fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving ADLC of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay of the annual operation fee by ADLC may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. ADLC shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

MONTANA AIR QUALITY PERMIT (MAQP) ANALYSIS Anaconda-Deer Lodge County MAQP #4863-00

I. Introduction/Process Description

A. Permitted Equipment

MAQP #4863-00 allows the operation of two crushers each with a vibrating scalping screen each powered by a diesel-fired engine rated for 235 horsepower (hp). Additional power is provided by two diesel-fired generators each rated for approximately 64 hp (associated engines rated at 80 hp). These two generators provide power for the various internal and external conveyors. A limit was taken on total facility operating hours to keep the total oxides of nitrogen (NO_x) emissions below the modeling threshold. The main permitted equipment is listed below: This permit is written to allow ADLC to use alternate diesel-fired engines as long as the total hp ratings of the units does not exceed that noted below.

Feed Hopper, Vibrating Scalping Screen and Jaw Crusher Feed Hopper, Vibrating Scalping Screen and Roll Crusher Up to 630 hp as rated by all diesel-fired engines Internal and External Conveyors and associated equipment

B. Source Description

Anaconda-Deer Lodge County (ADLC) proposes to use this crushing/screening plant and associated equipment to initially crush and screen asphalt material for use in road maintenance. Once the asphalt supply is depleted, ADLC will use the equipment to crush and screen rock materials. For a typical operational setup, materials are first processed in a jaw crusher, screened, then further processed in a roll crusher and finally transferred to storage piles for later use.

ADLC's initial location is the home pit and is located at 46.1334 latitude and 112.8947 West longitude. The township, range, section description is Township 4 North, Range 10 West in Section 6 in Deer Lodge County, Montana.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment

(including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
 - ADLC shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.204 Ambient Air Quality Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standard for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standard for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standard for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

ADLC must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter.

- (2) Under this rule, ADLC shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
- 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
- 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
- 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). ADLC is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A. General Provisions</u> apply to all equipment of facilities subject to an NSPS Subpart as listed below.
 - b. 40 CFR 60, Subpart IIII Standards of Performance for Stationary
 Compression Ignition Internal Combustion Engines. Owners and operators
 of stationary compression ignition internal combustion engines (CI ICE)
 that commence construction after July 11, 2005, where the stationary CI
 ICE are manufactured after April 1, 2006, and are not fire pump engines,
 are subject to this subpart. Based on the information submitted to the
 Department, the diesel engine to be used under MAQP #4863-00 may
 potentially be subject to this subpart. Engines that are added in the future
 may also be subject to this subpart.
- 8. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u>

 <u>Categories</u>. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment of facilities subject to a National Emissions Standard for Hazardous Air Pollutants (NESHAP) Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source

of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. A RICE is considered stationary if it remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Based on the information submitted by ADLC, the RICE equipment to be used under this permit may be subject to this subpart because they operate at an area source of HAP emissions and the engine may remain at the same home pit location for more than 12 consecutive months.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. ADLC submitted the appropriate application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit modification to construct, modify or use any facility with a potential to emit (PTE) of greater than 25 tons per year (TPY) of any pollutant. ADLC has a PTE greater than 25 TPY of NOx; therefore, an MAQP is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.

- 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
- 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
 Requirements. (1) This rule requires that a permit application be submitted prior
 to installation, modification, or use of a source. ADLC submitted the required
 permit application for the current permit action. (7) This rule requires that the
 applicant notify the public by means of legal publication in a newspaper of
 general circulation in the area affected by the application for a permit. ADLC
 submitted an affidavit of publication of public notice for the January 13, 2013,
 issue of the *Montana Standard*, a newspaper of general circulation in Butte in
 Silver Bow County, as proof of compliance with the public notice requirements.
- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this Permit Analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving ADLC of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. <u>ARM 17.8.762 Duration of Permit</u>. An MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. ARM 17.8.763 Revocation of Permit. An MAQP may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

- 13. ARM 17.8.764 Administrative Amendment to Permit. An MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an MAQP may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 TPY of any pollutant;
 - b. PTE > 10 TPY of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 TPY of PM₁₀ in a serious PM₁₀ nonattainment area.

- 2. <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4863-00 for ADLC, the following conclusions were made:
 - a. The facility's PTE is less than 100 TPY for any pollutant.
 - b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY of all HAPs.
 - c. This source is not located in a serious PM_{10} nonattainment area.
 - d. This facility is potentially subject to area source provisions of a current National Emissions Standard for Hazardous Air Pollutants (NESHAP) (40 CFR 63, Subpart ZZZZ).
 - e. This facility is potentially subject to current NSPS standards (40 CFR 60, Subpart IIII).
 - f. This source is not a Title IV affected source or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that ADLC will be a minor source of emissions as defined under Title V. While ADLC has accepted federally-enforceable limits on annual hours of operation which result in reduced potential emissions, the primary function of these limits is to reduce potential emissions to a level that eliminates the need for the facility to quantitatively demonstrate compliance with ambient air quality standards based on Department policy. By taking these federally-enforceable conditions into account when analyzing the PTE, ADLC is a true minor source with regards to Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, ADLC will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. ADLC shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. All visible emissions from the facility are limited to opacity as referenced in Sections II.A.1 and II.A.2 (ARM 17.8.752). In addition, all visible emissions from any other associated equipment are limited to 20% opacity. Also, ADLC must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking areas, and general plant property. ADLC shall use water spray bars and/or chemical dust suppressant, as necessary to maintain compliance with the opacity and reasonable precaution limitations as referenced in Section II.A.5 (ARM 17.8.752).

A. Diesel-Fired Engine and Generators

Due to the limited amount of emissions produced by the proposed diesel-fired engines and generators used in association with MAQP #4863-00 and the lack of cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel-fired engines and generators.

In addition, any new diesel-fired engine would likely be required to comply with the federal engine emission limitations including, for example, EPA Tier emission standards for non-road engines (40 CFR Part 1039), NSPS emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engine constitutes BACT for this engine. BACT for SO₂ emissions shall be satisfied by burning only ultra-low sulfur diesel (15 ppm) as referenced in 40 CFR 89. Appropriately rated EPA Tier emission standards rated models also have low particulate, PM10, CO, and VOCs emitted, and it is economically infeasible to require pollution controls on the diesel generator for these additional pollutants. The control options selected have controls and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

B. Fugitive Emissions

ADLC must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary. Using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will be considered BACT.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

		Emissions Tons/Year [PTE]						
Emission Source	PM	PM ₁₀	PM _{2.5}	PM _{Cond.}	СО	NO _x	SOx	VOC
Jaw and Roll Crusher	0.79	0.35	0.07					
Truck Unloading (Assume all material is unloaded that can be processed in crusher)		0.01						
Screens (Two Vibrating)		0.49	0.03					
Transfer Points (Assume 7 Transfer Points)		0.09	0.03					
Pile Formation		0.50	0.08					
Truck Loading (Assume all material is eventually loaded)		0.02	0.02					
Diesel Generators (Total 630 hp)		0.69	0.13	0.02	2.10	9.77	0.65	0.79
Unpaved Roadways (Haul Roads)	5.39	1.49	0.15					
EMISSIONS (Excluding Haul Roads)	4.32	2.15	0.34	0.02	2.10	9.77	0.65	0.79

a. Emission Inventory reflects enforceable limits on hours of operation

CO, carbon monoxide

NO_x, oxides of nitrogen

PM, particulate matter

PM₁₀, particulate matter with an aerodynamic diameter of 10 microns or less

PM_{2.5}, particulate matter with an aerodynamic diameter of 2.5 microns or less

SO₂, oxides of sulfur

TPY, tons per year

VOC, volatile organic compounds

Anaconda-Deer Lodge County. Emission Inventory Calculation Details

Crusher Capacity

Process 150 ton/hr (Two crushers)

Rate:

Operating 8760 hours/year

Hours

PM

Emissions:

Emission 0.0012 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

(0.0012 lbs/ton) * (150.00 ton/hour) =Calculations 0.18 lbs/hr

(0.18 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =

0.79 TPY

0.35

TPY

 PM_{10}

Emissions:

Emission 0.00054 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00054 lbs/ton) * (150.00 ton/hour) =0.08 lbs/hr

(0.08 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =

PM_{2.5} Emissions:

Emission 0.0001 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

(0.0001 lbs/ton) * (150.00 ton/hour) =0.02 Calculations lbs/hr

(0.02 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =

0.07 TPY

Truck Unloading (Assume all material is unloaded that can be processed in crushers)

Process ton/hr (Assumes each crusher operates independently) 75.0

Rate:

Operating 8760 hours/year

Hours

PM₁₀ Emissions:

Emission 0.000016 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.000016 lbs/ton) * (75.00 ton/hour) = 0.00 lbs/hr (0.00 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.01 TPY

Screening

Process 150 ton/hr

Rate:

Operating 8760 hours/year

Hours

PM (Screening controlled)

Emissions:

Emission 0.00220 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.0022 lbs/ton) * (150.00 ton/hour) = 0.33 lbs/hr

(0.33 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 1.45 TPY

PM₁₀ Emissions:

Emission 0.00074 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00074 lbs/ton) * (150.00 ton/hour) = 0.11 lbs/hr

(0.11 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.49 TPY

PM_{2.5} Emissions:

Emission 0.00005 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00005 lbs/ton) * (150.00 ton/hour) = 0.01 lbs/hr

(0.01 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.03 TPY

Transfer Points (Assume 6 Transfer Point that are Controlled)

Process 450 ton/hr (total of stacker and conveyors)

Rate:

Operating 8760 hours/year

Hours

PM (Conveyor Transfer Points)

Emissions:

Emission 0.00014 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00014 lbs/ton) * (450.00 ton/hour) = 0.06 lbs/hr

(0.06 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.28 TPY

PM₁₀ Emissions:

Emission 0.000046 lbs/ton

[AP-42 Factor

Table 11.19.2-2 8/041

(0.000046 lbs/ton) * (450.00 ton/hour) =0.02 lbs/hr Calculations

(0.02 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =

0.09 TPY

0.03

TPY

PM_{2.5}Emissions:

0.000013 Emission lbs/ton Factor [AP-42

Table 11.19.2-2 8/04]

(0.000013 lbs/ton) * (450.00 ton/hour) =0.01 Calculations lbs/hr

(0.01 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =

Pile Formation (Assume equipment thru- put is crusher total capacity)

Equation 1 from AP-42 Sec 13.2.4.3 **Process** 75 ton/hr

Rate: 11/06

Operating 8760 hrs/year U = wind speed miles per hour 8.15 (Typical Value)

Hours

k = particle size multiplier 0.74 AP-42 Sec 13.2.4-3 11/06

PM M = Moisture content % 2.52 (Typical Value)

Emissions:

0.003233753 lbs/ton E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4 Emission

Factor

(0.00323 lbs/ton) * (75.00 ton/hour) =0.24 Calculations lbs/hr

(0.24 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =1.06 TPY

Equation 1 from AP-42 Sec 13.2.4.3

11/06

U = wind speed miles per hour 8.15 8.15 (Typical Value) AP-42 Sec

0.35 k = particle size multiplier 0.35

13.2.4-3 11/06

 PM_{10} M = Moisture content % 2.52 2.52 (Typical

Emissions: Value)

Emission 0.001529478 lbs/ton E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4 Factor

(0.00153 lbs/ton) * (75.00 ton/hour) =Calculations 0.11 lbs/hr (0.11 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =0.50 TPY

PM_{2.5} Equation 1 from AP-42 Sec 13.2.4.3 Emissions: 11/06 U = wind speed miles per hour 8.15 8.15 (Typical Value) AP-42 Sec 0.053 0.35 k = particle size multiplier 13.2.4-3 11/06 M = Moisture content % 2.52 2.52 (Typical Value) Emission 0.000231607 lbs/ton E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4 Factor Calculations (0.00023 lbs/ton) * (75.00 ton/hour) =0.02 lbs/hr (0.02 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =TPY 0.08

Truck Loading (Assume all material is eventually loaded)

Modeled as Truck Loading Conveyor

Process 75 ton/hr Rate:

Operating 8760 hours/year

Hours

PM Emissions:

Emission 0.00014 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00014 lbs/ton) * (75.00 ton/hour) = 0.01 lbs/hr (0.01 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.05 TPY

PM₁₀ Emissions:

Emission 0.000046 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.000046 lbs/ton) * (75.00 ton/hour) = 0.00 lbs/hr (0.00 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.02 TPY

Diesel Generators (Total (Lowest rated engine for emission purposes since no known year) 630 hp)

Engine 630 hp
Rating: 1000 hrs/yr

Hours:

Fuel Input 4.41 MMbtu/hr BSFC = 7,000 BTU/hp-hr (AP42 Table 3.3-1 10/96)

32.190 gallons/hr (137,000 BTU/gal)

Particulate Emissions:

PM

Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.0022 lb/hp-hr) * (630 hp) = (1.39 lbs/hr) * (1000 hrs/yr) * (0.0005 to	ons/lb) =	1.39 0.69	lbs/hr TPY
PM ₁₀ Emissions:				
Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 6/06]		
Calculations	(0.0022 lb/hp-hr) * (630 hp) = (1.39 lbs/hr) * (1000 hrs/yr) * (0.0005 to	ons/lb) =	1.39 0.69	lbs/hr TPY
PM _{2.5} Emission	ns (filterable):			
Emission	0.0497 lb/MMBtu	[AP-42 3.4-1, 10/96]		
Factor Calculations	(0.0497 lb/MMBtu) * (4.41 MMBtu/hr) (0.22 lbs/hr) * (1000 hrs/yr) * (0.0005 to		0.22 0.11	lbs/hr TPY
PM _{2.5} Emission (condensable)				
Emission Factor	0.0077 MMBtu	[AP-42 3.4-1, 10/96]		
Calculations	(0.0077 lb/MMBtu) * (4.41 MMBtu/hr) (0.03 lbs/hr) * (1000 hrs/yr) * (0.0005 to		0.03 0.02	lbs/hr TPY
CO Emissions:				
Emission Factor	0.00668 lb/hp-hr	[AP-42 3.3-1, 6/06]		
Calculations	(0.00668 lb/hp-hr) * (630 hp) = (4.21 lbs/hr) * (1000 hrs/yr) * (0.0005 to	ons/lb) =	4.21 2.10	lbs/hr TPY
NOx Emissions:				
Emission Factor	0.031 lb/hp-hr	[AP-42 3.3-1, 6/06]		
Calculations	(0.031 lb/hp-hr) * (630 hp) = (19.53 lbs/hr) * (1000 hrs/yr) * (0.0005	tons/lb) =	19.53 9.77	lbs/hr TPY
SO _x Emissions:				
Emission Factor	0.00205 lb/hp-hr	[AP-42 3.3-1, 6/06]		
Calculations	(0.0021 lb/hp-hr) * (630 hp) = (1.29 lbs/hr) * (1000 hrs/yr) * (0.0005 to	ons/lb) =	1.29 0.65	lbs/hr TPY

VOC

Emissions:

Emission 0.00251 lb/hp-hr [AP-42 3.3-1, 6/06]

Factor

Calculations (0.0025 lb/hp-hr) * (630 hp) = 1.58 lbs/hr (1.58 lbs/hr) * (1000 hrs/yr) * (0.0005 tons/lb) = 0.79 TPY

Unpaved Roadways (Haul Roads)

Emission	$EF = k(s/12)^a * (W/3)^b$	[AP-42 13.2.2.2, 11/06]

Factor

EF, Emission Factor = Ibs Emitted Per Vehicle Mile Traveled (VMT)

k, Empirical Constant PM =	4.9	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant PM ₁₀ =	1.5	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant PM _{2.5} =	0.15	[AP-42 Table 13.2.2-2, 11/06]
s, Surface Material Silt Content (%) =	7.1	[AP-42 Table 13.2.2-1, 11/06]
W, Mean Vehicle Weight (tons) =	48	[Estimated]
a, Empirical Constant PM =	0.7	[AP-42 Table 13.2.2-2, 11/06]
a, Empirical Constant PM _{10 and} PM _{2.5} =	0.9	[AP-42 Table 13.2.2-2, 11/06]
b, Empirical Constant PM , PM10 and PM _{2.5} =	0.45	[AP-42 Table 13.2.2-2, 11/06]

PM Emissions(uncontrolled): PM30

Emission EF = $4.9 * (7.1/12)^{0.7} * (48/3)^{0.45} = 11.82$ lbs/VMT

Factor

Calculations (11.82 lbs/VMT) * (5 miles/day) = 59.08 lbs/day

(59.08 lbs/day) * (365 days/yr) * (0.0005 tons/lb) = 10.78 TPY

50% Control Efficiency 5.39 TPY

 PM_{10}

Emissions(uncontrolled):

Emission EF = $1.5 * (7.1/12)^0.9 * (48/3)^0.45 = 3.26$ lbs/VMT

Factor

Calculations (3.26 lbs/VMT) * (5 miles/day) = 16.28 lbs/day (16.28 lbs/day) * (365 days/yr) * (0.0005 tons/lb) = 2.97 TPY

50% Control Efficiency 1.486 TPY

PM_{2.5}

Emissions(uncontrolled):

Emission EF = $0.15 * (7.1/12)^{0.9} * (48/3)^{0.45} = 0.33$ lbs/VMT

Factor

Calculations (0.33 lbs/VMT) * (5 miles/day) = 1.63 lbs/day

(1.63 lbs/day) * (365 days/yr) * (0.0005 tons/lb) = 0.30 TPY

50% Control Efficiency 0.15 TPY

V. Existing Air Quality

ADLC's initial location is the home pit and is located at 46.1334 latitude and 112.8947 West longitude. The township, range, section description is Township 4 North, Range 10 West in Section 6 in Deer Lodge County, Montana. This location and those areas for which this facility is permitted to operate under MAQP #4863-00 are considered attainment/unclassified for all the National Ambient Air Quality Standards (NAAQS).

VI. Air Quality Impacts

This permit is for a crushing and screening facility. MAQP #4863-00 will cover the operation at any location within the State of Montana, excluding those counties that have a Department approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain PM_{10} nonattainment areas. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard.

VII. Ambient Air Impact Analysis

The Department determined that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting
		private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private
		property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others,
		disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an
		easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate
		state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the
		property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact,
		investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the
		property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the
		physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in
		response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b,
		7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Analysis Prepared By: Craig Henrikson

Date: January 18, 2013

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901, Helena, MT 59620 (406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Anaconda-Deer Lodge County Road Department 800 S Main St.

Anaconda, MT 59711

Montana Air Quality Permit Number: 4863-00

Preliminary Determination Issued: 01/31/2013 Department Decision Issued: 02/19/2013

Permit Final: *03/07/2013*

- Legal Description of Site: Anaconda-Deer Lodge County Road Department (ADLC) submitted an application to operate a crushing and screening facility initially intended to process used asphalt as road maintenance material. Later the equipment will be used to crush and screen rock materials. Montana Air Quality Permit (MAQP) #4863-00 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. An addendum to this air quality permit would be required if ADLC intends to locate in or within 10 km of certain PM₁₀ nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
- 2. *Description of Project*: The permit application is for the operation of a crushing and screening operation and diesel-fired engines up to 630 horsepower (hp). The diesel-fired engines provide power to the two crushers and the diesel-fired generators are used to provide power to the ADLC conveyors.
- 3. *Objectives of Project*: The object of the project would be to produce material which can be used for road maintenance and repair by the county. The issuance of MAQP #4863-00 would allow ADLC to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
- 4. Alternatives Considered: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because permitting ADLC's equipment in a de minimis fashion should facilitate compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. A Listing of Mitigation, Stipulations, and Other Controls: A listing of the enforceable permit conditions and a permit analysis, including a Best Available Control Technology (BACT) analysis, is included in this permit action.
- 6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

4863-00 1 FINAL: 3/07/2013

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats				X		Yes
В	Water Quality, Quantity, and Distribution			X			Yes
С	Geology and Soil Quality, Stability and Moisture				X		Yes
D	Vegetation Cover, Quantity, and Quality				X		Yes
Е	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources				X		Yes
Н	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts				X		Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The operation of the crushing and screening facility would have no impacts upon the terrestrial and aquatic life and habitats in areas where the facility may operate. Although air pollutant deposition would occur in the areas where the equipment would operate, the size and nature of the operation, dispersion characteristics of pollutants, and conditions placed in MAQP #4863-00 would result in no impacts as the site is former industrial and is within a Superfund cleanup site. Therefore, the operation of the equipment would present no impacts as no terrestrial and aquatic life is present in the area of potential operation.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the crushing and screening facility would operate, there would only be minor impacts on water quality, quantity, and distribution because of the nature, size, operational requirements, and conditions placed in MAQP #4863-00 for the facility. Further, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition of pollutants would be minor. In addition, any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area. Overall, the operation of the equipment would have minor impacts to water quality, quantity, and distribution in the area of operations.

C. Geology and Soil Quality, Stability, and Moisture

As a result of the operation of the crushing and screening facility, there would be no impacts to the geology and soil quality, stability, and moisture near the equipment's operational area because of the increased vehicle traffic and deposition of pollutants from the facility. As explained in Section 7.F. of this EA, the facility's size, operational requirements, nature of the operation being located near an existing gravel pit, and conditions placed in MAQP #4863-00 would minimize the impacts from deposition.

D. Vegetation Cover, Quantity, and Quality

The operation of the crushing and screening equipment would result in no impacts to the vegetative cover, quantity, and quality, because the proposed operation would be located near an existing gravel pit and the area is a former industrial site and located within a Superfund cleanup site. As explained in Section 7.F. of this EA, the Department determined that, due to the nature of the operation, conditions placed in MAQP #4863-00, and dispersion characteristics of the emissions, any impacts from deposition would not be expected. In addition, because the water usage would be limited to use in particulate control (as described in Section 7.B. of this EA) and presence on an existing former industrial site (as described in Section 7.C. of this EA), corresponding vegetative impacts from water and soil disturbance would not occur.

E. Aesthetics

The crushing and screening facility would be visible and would create noise in the areas where it would operate. MAQP #4863-00 would include conditions to control emissions (including visible emissions) from the equipment and the surrounding work area. The diesel-fired equipment would be moderately sized by industrial standards and would be used to power permitted equipment operated by ADLC. The proposed project site is within a previous industrial area and is located within a Superfund clean-up site and therefore, any aesthetic impact would be minor.

F. Air Quality

Air quality impacts from the operation of the crushing and screening facility would be minor because emissions from the crushing and screening facility would be relatively small when controls are applied to the equipment. Dispersion and deposition of pollutants would occur from the operation of the crushing and screening facility; however, the Department determined that any air quality impacts from the pollutants would be minor due to dispersion characteristics (from factors such as wind speed and wind direction) and conditions placed in MAQP #4863-00.

MAQP #4863-00 would include conditions limiting opacity from the crushing and screening facility and would require that reasonable precautions be taken to control emissions from haul roads, access roads, parking lots, or the general work area. In addition, the permit would also limit total emissions from the crushing and screening facility and any additional equipment operated at the same site to 250 tons per year or less. Further, because the crushing and screening facility has less than 100 tons per year of potential emissions for any pollutant generated, the Department determined that the crushing and screening facility is a minor source of emissions as defined under Title V.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify species of special concern that may be present in the proposed areas of operation, the Department contacted the Montana Natural Heritage Program (MNHP) for a review of species of special concern. Three species of concern were identified within the area where the crushing and screening facility is proposed. These include Westslope Cutthroat Trout, Bull Trout and the Blue Heron. Issuance of this permit would increase emissions to the atmosphere near any location proposed for the operation of the crushing and screening facility. However, as explained in Section 7.F. of this EA, because of the nature of the crushing and screening facility, and conditions placed in MAQP #4863-00, any impacts to unique endangered, fragile, or limited environmental resources from the deposition of pollutants would not be expected given the location of the proposed facility on a former industrial site.

H. Demands on Environmental Resource of Water, Air, and Energy

Water would be used on particulate emissions at equipment transfer points, haul roads, access roads, parking lots, or the general plant property, as necessary, to control dust resulting from indirect use of the crushing and screening facility. The diesel-fired equipment would consume energy from diesel fuel, a non-renewable resource. Generally, the operations are seasonal and would result in small demands on environmental resources. Therefore, any impacts on the demands of the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

According to correspondence with the Montana State Historic Preservation Office (SHPO), there have been previously recorded sites in the vicinity of the proposed site location. However, given the proposed site is on a former industrial site no impact to historical or archaeological sites would occur. Therefore, it is unlikely that the project would affect any historic or archaeological site and no resulting impacts.

J. Cumulative and Secondary Impacts

The operation of the crushing and screening facility would cause no effects to the physical and biological environment because the site is former industrial land and is within the site of a Superfund clean-up site. However, any operations would have to apply for and receive the appropriate permits in addition to this MAQP prior to operation. The permits would address the environmental impacts associated with the operations at the proposed site.

The crushing and screening facility operations would be limited by MAQP #4863-00 to total emissions of 250 tons/year or less from non-fugitive crushing and screening facility operations and any other additional equipment used at any given site.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
В	Cultural Uniqueness and Diversity				X		Yes
С	Local and State Tax Base and Tax Revenue				X		Yes
D	Agricultural or Industrial Production				X		Yes
Е	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities				X		Yes
G	Quantity and Distribution of Employment				X		Yes
Н	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity				X		Yes
K	Locally Adopted Environmental Plans and Goals					X	Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The operation of the crushing and screening facility would not likely alter or disrupt any local lifestyles or communities (social structures and mores) in the area of operation because the limited operation of the facility and use of a former industrial site location.

B. Cultural Uniqueness and Diversity

The operation of crushing and screening equipment would have no impact on the cultural uniqueness and diversity because the equipment operations would be at a site which is a former industrial area and within a Superfund cleanup site.

C. Local and State Tax Base and Tax Revenue

The proposed operation of the crushing and screening facility would have no affect on local and state tax base and tax revenue as the county will run the operation with existing personnel

D. Agricultural or Industrial Production

No impact on agricultural or industrial production would occur as the proposed site for the crushing and screening facility would be located in a former industrial area and is within a Superfund cleanup site.

E. Human Health

MAQP #4863-00 would incorporate conditions to ensure that the crushing and screening facility would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of

this EA, the Department determined that any impacts from deposition of pollutants would be minor due to dispersion characteristics and conditions placed in MAQP #4863-00. The air emissions from this facility would be minimized by opacity limitations on the crushing and screening facility and the surrounding area of operation.

F. Access to and Quality of Recreational and Wilderness Activities

This plant be located on previously disturbed property, and in a previously used industrial area as well as within a Superfund cleanup site, and therefore does not impact access to recreational and wilderness activities.

G. Quantity and Distribution of Employment

Given the relatively small production capacity of the operation, it is not expected that the activities from the operation of the crushing and screening facility would significantly affect the quantity and distribution of employment in any given area. Existing personnel are expected to operate the proposed equipment and the number of planned operating hours is low.

H. Distribution of Population

Given the relatively small production capacity of the operation, it is not expected that the activities from the crushing and screening facility would disrupt the normal population distribution of any given area. No secondary activities are identified to move to the current proposed area as a result of the current project.

I. Demands of Government Services

Government services may be required for acquiring the appropriate permits and ensuring compliance with the permits that are issued; however, the government services required would be minor.

J. Industrial and Commercial Activity

The operation of the crushing and screening facility would represent only a minor increase in the industrial activity in any given area. No additional industrial or commercial activities are identified from the operation of the crushing and screening facility and secondary activities are not expected from the limited operation facility. Therefore, no industrial and commercial activity resulting from the current permit action is expected.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans or goals at any given site that the crushing and screening facility may be operated at under MAQP #4863-00. The conditions identified in MAQP #4863-00 would apply to operation of the crushing and screening facility at the proposed initial site as well as any other location in Montana as described in Section 1 of this EA.

L. Cumulative and Secondary Impacts

Overall, the cumulative and secondary social and economic impacts from this project would be minor because the crushing and screening facility is considered a small sized operation by industrial standards. No new businesses are expected to be drawn to the area as a result of the county run operation. In addition, any social and economic impacts that are created would be minor because of the relatively small size and nature of the operation.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: Because this crushing and screening facility is relatively small in size and must use reasonable precautions to control emissions, any impacts created would be minor impacts.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau.

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